

## Water-Data Report 2008

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ**

## BARNEGAT BAY

LOCATION.--Lat 40°02'24", long 74°03'08" referenced to North American Datum of 1983, Mantoloking Borough, Ocean County, NJ, Hydrologic Unit 02040301, on wooden bulkhead at west end of Old Bridge Avenue in Mantoloking, 2.1 mi south of Bay Head, and 4.7 mi north of Lavallette.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Annual maximum tide, water years 1980-85, 1992-93. Continuous-record tide gage, June 1993 to July 2004, November 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft NAVD of 1988. To determine approximate elevations to NGVD of 1929, add 1.12 ft. To determine approximate elevations to Mean Lower Low Water datum, add 0.08 ft (revised to Tidal Epoch 1983-2001). Prior to October 2000, datum of gage at 0.0 ft NGVD of 1929. Data published to NGVD of 1929 can be adjusted to NAVD of 1988 by subtracting 1.12 ft. Online peaks have been adjusted to current datum.

REMARKS.--Missing gage-height record Feb 12 and short portions of other days. Gage cannot measure tide levels below -1.28 ft. Tide levels below -1.28 have been estimated. Prior to Apr 21, 2005, gage could not measure tide levels below -0.12 ft. Summaries for months with short periods of missing gage-height record have been estimated with little or no loss of accuracy. Some periods cannot be estimated and are noted by dashed (--) lines. Satellite stage telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 3.81 ft (from crest-stage gage, adjusted to NAVD of 1988), Dec 11, 1992; minimum elevation, estimated at -1.6 ft, Oct 30, 2006 and Jan 3, 2008, although a lower tide likely occurred during period of missing record on Feb 16, 2007 (elevation could not be accurately estimated).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 3.4 ft (from high-water mark at the northwest corner of the intersection of Bay Avenue and Downer Avenue in Mantoloking, adjusted to NAVD of 1988), Mar 6 or 7, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 2.18 ft, Dec 16; minimum elevation, estimated at -1.6 ft, Jan 3, although a lower tide likely occurred during period of missing record on Feb 12 (elevation could not be accurately estimated).

Statistics of Tide Elevations, in feet  
Water Year October 2007 to September 2008

Month	Mean High Tide	Mean Water Level	Mean Low Tide
October	0.63	0.36	0.06
November	0.29	0.02	-0.23
December	0.12	-0.17	-0.49
CALENDAR YEAR 2007	0.36	0.09	-0.20
January	0.07	-0.18	-0.48
February	0.21	-0.10	-0.42
March	0.23	-0.08	-0.38
April	0.35	0.08	-0.21
May	0.75	0.43	0.11
June	0.64	0.36	0.06
July	0.58	0.32	0.03
August	0.56	0.29	0.00
September	0.61	0.32	0.02
WATER YEAR 2008	0.42	0.14	-0.15

## 01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
[*e*, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	0.74	0.35	-0.05	0.34	0.07	-0.12	-0.48	-1.03	-1.24	0.33	0.04	-0.42
<b>2</b>	0.70	0.27	-0.20	-0.22	-0.50	-0.90	-0.03	<i>e</i> -0.7	<i>e</i> -1.5	-0.08	-0.71	-1.05
<b>3</b>	0.67	0.22	-0.20	1.53	0.13	-0.63	0.48	-0.09	-0.34	-0.93	<i>e</i> -1.2	<i>e</i> -1.6
<b>4</b>	0.70	0.27	-0.15	1.18	0.71	0.27	-0.62	-1.0	-1.27	-0.30	-0.69	-1.19
<b>5</b>	0.53	0.14	-0.24	0.67	0.06	-0.36	-0.52	<i>e</i> -0.9	<i>e</i> -1.5	-0.71	-0.91	-1.14
<b>6</b>	0.53	0.11	-0.20	1.15	0.60	0.24	-0.02	-0.34	-0.80	-0.30	-0.67	-1.16
<b>7</b>	0.66	0.15	-0.27	0.26	-0.08	-0.45	0.14	-0.25	-0.57	0.27	-0.19	-0.71
<b>8</b>	0.88	0.58	0.28	0.17	-0.16	-0.57	-0.01	-0.44	-0.71	0.40	-0.03	-0.51
<b>9</b>	0.80	0.66	0.24	0.49	0.10	-0.30	-0.24	-0.62	-0.99	0.85	0.20	-0.27
<b>10</b>	1.52	1.17	0.82	0.55	0.20	-0.27	0.18	-0.31	-0.79	-0.02	-0.36	-0.71
<b>11</b>	1.44	1.18	0.63	0.86	0.44	0.06	0.27	-0.16	-0.63	1.09	0.21	-0.37
<b>12</b>	1.71	0.91	0.23	0.65	0.19	-0.17	0.20	-0.26	-0.80	0.40	0.06	-0.25
<b>13</b>	0.85	0.46	0.15	0.38	-0.04	-0.36	-0.04	-0.51	-0.98	0.17	-0.13	-0.53
<b>14</b>	0.59	0.20	-0.15	0.61	0.09	-0.38	0.69	0.24	-0.11	1.16	0.41	0.44
<b>15</b>	0.52	0.08	-0.28	0.62	0.34	-0.06	-0.03	-0.37	-0.78	0.99	0.51	0.24
<b>16</b>	0.39	-0.02	-0.42	0.09	-0.37	-0.77	2.18	0.91	-0.19	0.20	-0.33	-0.61
<b>17</b>	0.77	0.20	-0.25	-0.41	-0.70	-0.93	---	<i>e</i> -0.4	<i>e</i> -1.5	0.26	-0.15	-0.88
<b>18</b>	0.77	0.27	-0.21	-0.38	-0.63	-0.88	-0.80	<i>e</i> -1.1	<i>e</i> -1.4	1.07	0.47	-0.03
<b>19</b>	1.53	0.82	0.30	0.44	0.01	-0.23	-0.05	-0.45	-0.64	0.13	-0.22	-0.50
<b>20</b>	0.80	0.61	0.16	0.81	0.44	0.27	0.38	-0.06	-0.53	0.04	-0.35	-0.58
<b>21</b>	0.31	0.01	-0.42	0.78	0.41	-0.12	0.77	0.21	-0.50	-0.39	-0.66	-0.92
<b>22</b>	0.48	0.07	-0.28	1.15	0.73	0.22	1.12	0.65	0.27	-0.17	-0.51	-0.90
<b>23</b>	1.09	0.65	0.13	0.48	0.08	-0.23	1.89	0.95	0.06	-0.12	-0.49	-0.86
<b>24</b>	0.65	0.25	-0.26	0.33	-0.03	-0.46	1.22	0.64	0.15	-0.04	-0.42	-0.81
<b>25</b>	-0.28	-0.34	-0.62	0.38	-0.01	-0.38	-0.18	-0.43	-0.74	0.10	-0.30	-0.61
<b>26</b>	0.97	0.53	0.01	0.40	0.00	-0.50	-0.22	-0.67	-1.05	-0.03	---	---
<b>27</b>	1.82	1.09	0.64	0.63	0.05	-0.38	1.15	0.33	0.48	0.33	0.01	-0.36
<b>28</b>	0.88	0.17	-0.28	-0.25	-0.70	-1.08	0.88	0.39	-0.09	1.18	0.73	0.43
<b>29</b>	0.41	-0.07	-0.51	0.14	-0.30	-0.67	1.11	0.50	-0.13	1.12	0.67	0.11
<b>30</b>	0.36	0.00	-0.36	-0.22	-0.45	-0.74	0.25	-0.06	-0.37	1.16	0.43	0.19
<b>31</b>	0.57	0.05	-0.42	---	---	---	0.52	0.14	0.01	-0.56	-0.89	-1.13
<b>Max</b>	1.82	1.18	0.82	1.53	0.73	0.27	2.18	0.95	0.48	1.18	0.73	0.44
<b>Min</b>	-0.28	-0.34	-0.62	-0.41	-0.70	-1.08	-0.80	<i>e</i> -1.1	<i>e</i> -1.5	-0.93	<i>e</i> -1.2	<i>e</i> -1.6

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>February</b>			<b>March</b>			<b>April</b>			<b>May</b>		
<b>1</b>	0.93	-0.26	-0.65	0.67	0.01	---	0.69	0.43	0.00	0.74	0.30	-0.20
<b>2</b>	0.51	-0.15	0.36	-0.60	-0.92	-1.13	-0.64	-0.85	-1.23	0.60	0.24	-0.11
<b>3</b>	-0.69	-0.94	-1.28	0.21	-0.33	-1.19	-0.44	-0.84	-1.26	0.91	0.25	-0.09
<b>4</b>	-0.33	-0.65	-1.13	0.51	0.26	-0.07	0.24	-0.32	-0.95	1.24	0.70	0.33
<b>5</b>	0.48	-0.04	-0.64	1.33	0.53	-0.01	0.29	-0.03	-0.38	0.60	0.56	0.19
<b>6</b>	1.13	0.39	-0.34	0.19	-0.12	-0.44	0.36	-0.32	-0.84	1.05	0.50	0.14
<b>7</b>	0.88	0.44	0.00	0.00	-0.17	-0.55	0.31	0.01	-0.26	0.96	0.54	0.11
<b>8</b>	0.80	0.41	-0.07	1.58	1.10	0.29	0.69	0.30	0.01	1.32	0.71	0.11
<b>9</b>	0.77	0.36	-0.05	1.98	-0.01	-1.05	0.84	0.25	-0.24	0.85	0.02	-0.66
<b>10</b>	0.93	0.44	0.26	-0.75	e-1.0	e-1.4	0.64	0.22	-0.14	1.16	0.74	0.54
<b>11</b>	-0.98	---	---	-0.23	-0.47	-0.93	0.59	0.25	-0.15	1.27	0.90	0.45
<b>12</b>	---	---	---	0.57	0.02	-0.62	0.97	0.57	0.40	0.76	-0.01	-1.05
<b>13</b>	0.73	0.14	-0.05	0.35	-0.10	-0.52	0.73	0.27	-0.07	1.75	1.21	0.69
<b>14</b>	0.43	0.00	-0.32	0.55	0.03	-0.23	0.53	0.15	-0.30	1.38	1.03	0.58
<b>15</b>	0.45	-0.19	-0.44	0.66	0.21	-0.50	0.13	-0.21	-0.62	1.06	0.77	0.34
<b>16</b>	-0.44	-0.71	-1.04	1.07	0.64	0.13	0.19	-0.13	-0.41	0.75	0.51	0.18
<b>17</b>	0.43	-0.06	-0.77	0.24	-0.09	-0.42	0.46	-0.06	-0.40	0.92	0.76	0.32
<b>18</b>	1.35	0.68	0.33	1.01	0.34	-0.45	0.79	0.35	-0.10	1.36	0.83	0.46
<b>19</b>	0.59	0.03	-0.24	1.50	1.21	0.64	0.44	0.27	-0.09	1.28	0.58	0.14
<b>20</b>	-0.27	-0.65	-0.89	2.02	0.90	0.06	0.70	0.26	-0.14	0.76	0.29	-0.15
<b>21</b>	-0.50	-0.70	-1.10	0.48	-0.45	-1.03	0.53	-0.11	-0.45	0.90	0.57	0.27
<b>22</b>	0.02	-0.35	-0.71	-0.62	-0.83	-1.14	0.29	-0.17	-0.46	1.05	0.40	-0.15
<b>23</b>	0.43	0.10	-0.22	-0.20	-0.43	-0.83	0.29	0.08	-0.31	0.65	0.04	-0.38
<b>24</b>	0.40	0.06	-0.27	0.14	-0.39	-0.68	0.60	0.00	-0.32	0.34	0.07	-0.29
<b>25</b>	0.40	-0.09	-0.51	-0.20	-0.18	-0.75	0.34	0.04	-0.29	0.52	0.23	-0.16
<b>26</b>	0.47	0.11	-0.33	1.17	0.23	-0.65	0.60	0.23	0.02	1.03	0.62	0.20
<b>27</b>	0.79	0.22	-0.42	-0.08	-0.46	-0.75	0.76	0.32	-0.07	0.78	0.25	-0.09
<b>28</b>	-0.17	-0.65	-1.20	0.08	-0.29	-0.64	1.29	0.65	0.37	0.00	-0.53	-1.12
<b>29</b>	-0.69	-0.63	-0.99	-0.12	-0.50	-0.73	1.21	0.58	0.20	0.08	-0.16	-0.50
<b>30</b>	---	---	---	-0.54	-0.75	-0.93	0.52	0.23	-0.06	0.56	-0.07	-0.54
<b>31</b>	---	---	---	0.16	-0.32	-0.85	---	---	---	0.96	0.59	0.29
<b>Max</b>	1.35	0.68	0.36	2.02	1.21	0.64	1.29	0.65	0.40	1.75	1.21	0.69
<b>Min</b>	-0.98	---	---	-0.75	e-1.0	e-1.4	-0.64	-0.85	-1.26	0.00	-0.53	-1.12

## 01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
[*e*, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>June</b>				<b>July</b>				<b>August</b>			
<b>1</b>	0.68	0.22	-0.22	0.47	0.50	0.18	1.00	0.57	0.25	0.59	0.19	-0.15
<b>2</b>	0.74	0.17	-0.12	1.04	0.42	0.06	1.06	0.81	0.39	0.51	0.22	-0.23
<b>3</b>	0.41	0.48	0.03	0.96	0.66	0.38	1.12	0.54	0.12	1.04	0.69	0.29
<b>4</b>	1.28	0.77	0.08	1.08	0.24	-0.23	0.76	0.33	0.00	1.00	0.65	0.17
<b>5</b>	0.89	0.27	-0.09	0.75	0.37	0.06	0.63	0.34	-0.10	0.66	0.36	0.00
<b>6</b>	0.72	0.41	0.08	0.79	0.30	-0.05	0.81	0.51	0.15	1.37	0.55	0.03
<b>7</b>	0.86	0.41	0.00	0.65	0.34	-0.03	1.01	0.51	0.06	0.33	0.12	-0.32
<b>8</b>	0.62	0.19	-0.14	0.95	0.47	-0.01	0.76	0.42	0.02	0.41	-0.16	-0.60
<b>9</b>	0.54	0.22	-0.21	0.64	0.36	0.01	0.74	0.30	-0.18	0.61	0.27	-0.04
<b>10</b>	0.82	0.40	-0.03	0.29	0.02	-0.46	0.68	0.28	-0.09	0.33	-0.14	-0.61
<b>11</b>	0.47	0.19	-0.25	0.42	0.00	-0.40	0.66	0.28	-0.13	0.39	-0.01	-0.30
<b>12</b>	0.28	-0.04	-0.44	0.66	0.21	-0.10	0.54	0.09	-0.33	0.80	0.34	0.01
<b>13</b>	0.46	-0.05	-0.45	0.78	0.31	-0.01	0.68	0.16	-0.19	0.66	0.20	-0.15
<b>14</b>	0.98	0.19	-0.22	0.58	0.25	-0.24	0.32	0.27	0.01	0.74	0.57	0.11
<b>15</b>	0.83	0.28	-0.11	0.50	0.05	-0.33	0.67	0.44	0.08	1.25	0.52	-0.02
<b>16</b>	1.28	0.74	0.28	0.06	0.04	-0.27	0.36	0.26	-0.15	0.43	0.11	-0.26
<b>17</b>	0.57	0.44	-0.02	0.54	0.14	-0.10	0.59	0.20	-0.12	0.50	0.22	-0.14
<b>18</b>	0.84	0.56	0.22	0.60	0.23	-0.03	0.68	0.36	0.00	0.60	0.11	-0.33
<b>19</b>	1.12	0.56	0.29	0.66	0.42	0.02	0.78	0.24	-0.25	0.54	0.12	-0.32
<b>20</b>	0.98	0.56	0.18	0.81	0.55	0.05	0.39	0.00	-0.40	0.89	0.52	0.11
<b>21</b>	0.92	0.45	0.16	0.98	0.43	0.07	0.48	0.14	-0.27	0.82	0.40	-0.04
<b>22</b>	0.85	0.60	0.31	0.68	0.26	-0.06	0.31	0.01	-0.39	0.31	0.00	-0.48
<b>23</b>	0.89	0.49	0.18	0.80	0.42	-0.16	0.20	-0.12	-0.54	0.59	-0.01	-0.48
<b>24</b>	0.70	0.17	-0.23	0.89	0.56	0.33	0.76	0.14	-0.40	0.35	0.12	-0.23
<b>25</b>	0.47	0.08	-0.35	0.61	0.20	-0.26	0.61	0.23	-0.22	0.07	-0.14	-0.36
<b>26</b>	0.37	0.13	-0.18	0.91	0.28	-0.30	0.58	-0.11	-0.57	1.47	0.75	-0.61
<b>27</b>	0.98	0.25	-0.18	0.84	0.45	0.00	0.60	0.08	-0.30	1.18	0.83	0.44
<b>28</b>	0.94	0.47	0.04	0.81	0.27	-0.19	0.78	0.26	-0.11	1.21	0.82	0.41
<b>29</b>	1.16	0.58	0.10	0.78	0.28	-0.14	0.72	0.51	0.20	1.01	0.71	0.34
<b>30</b>	1.02	0.58	-0.06	0.87	0.32	-0.04	1.03	0.59	0.20	1.06	0.68	0.17
<b>31</b>	---	---	---	0.56	0.43	0.08	0.82	0.25	-0.05	---	---	---
<b>Max</b>	1.28	0.77	0.31	1.08	0.66	0.38	1.12	0.81	0.39	1.47	0.83	0.44
<b>Min</b>	0.28	-0.05	-0.45	0.06	0.00	-0.46	0.20	-0.12	-0.57	0.07	-0.16	-0.61

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued**